

GAS SYSTEM INSPECTOR

JOB DESCRIPTION

Classification Responsibilities: A Gas System Inspector is responsible for inspecting all construction, maintenance, and repair work involving the City's gas system to ensure that all work conforms to gas industry standards, as well as City, state, and federal requirements. Incumbents inspect and monitor work performed by either City crews or private contractors. Employees in this class often assist in project management activities such as coordinating with contractors to facilitate work progress, expediting the delivery of required construction materials, and making on-site construction changes to accommodate field conditions not anticipated in the design stage of a project. Additionally, an employee in this class may be responsible for training and certifying other unit employees in various pipe-joining methods such as polyethylene (PE) fusion and metal pipe welding. Incumbents often act in a lead capacity in response to gas emergencies to secure uncontrolled venting of gas. This position performs related duties as required.

Distinguishing Features: A Gas System Inspector works alone. Employees in this class are expected to exercise considerable initiative and independent judgment in determining the proper course of action, and resolving day-to-day operating problems. An employee in this class is required to use appropriate safety equipment, and follow safety procedures in performing assignments. This class is subject to emergency call-out and must be willing to work overtime as required. This class is supervised by the Gas System Supervisor through meetings, conferences, and reports concerning certification and inspection activities, problems encountered, and overall results achieved. This class is FLSA nonexempt.

QUALIFICATIONS

Employee Values: All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

Minimum Qualifications Required. Graduation from high school or GED. Any combination of training, education, and experience equivalent to five years' full-time employment in the construction, maintenance, and repair of underground natural gas delivery systems, including responsibility for interpreting project plans, blueprints, and utility plat maps **OR** two years' full-time employment with the City of Mesa as a Gas Cathodic Protection Technician or Gas System Crew Leader.

Special Requirements. Must possess or be able to obtain certification in polyethylene (PE) fusion within three months of hire or promotion date. Must be able to successfully complete City of Mesa's operator qualification requirements within six months of hire date. Must possess a valid Arizona Driver's License by hire date.

Substance Abuse Testing. This class is subject to DOT drug and alcohol testing as outlined in 49 Code of Federal Regulations (CFR) Part 199 for the Pipeline and Hazardous Materials Safety Administration (PHMSA).

Preferred/Desirable Qualifications. Graduation from an accredited college or university with an Associate's Degree in Construction Management or related field is desirable. Prior experience and certification as a Certified Welding Inspector from the American Welding Society is also desirable.

ESSENTIAL FUNCTIONS

Communication: Prepares daily inspection report for each job site visited, noting pertinent data on the appropriate inspection form, and detailing the quality and quantity of work being done. Verifies certification and competency of both contract personnel and City employees certified as gas line welders and PE fusers on the City's gas lines. Maintains a variety of records and prepares necessary reports concerning inspection, certification, and related gas system activities. Coordinates the activities and schedules of contractors, site developers, and various other individuals and agencies in order to minimize conflicts and congestion at a construction site. Verifies work completed so that contractors can be paid. Prepares clear, concise, and thorough written reports.

Manual/Physical: Operates a motor vehicle requiring a standard Arizona Driver's License to travel to job sites to inspect proper installation and construction of natural gas mains and services, and respond to emergencies. Inspects gas line work for compliance with project plans, specifications, and standards. Visually inspects pipe, gas line placement, welds, fusion joints, protective coatings, and tracer wires. Uses high voltage, holiday detection equipment to ensure cathodic protection on steel pipe and components. Conducts pressure tests of completed gas lines using gauges and pressure recording equipment to ensure there are no leaks prior to introduction of natural gas. Visually inspects gas line trenches for proper depth, and to ensure that proper base and backfill materials have been used in compliance with City specifications and regulatory agency standards. Controls escaping gas resulting from breaks in and damage to gas lines to minimize hazards to work crews and the general public by using squeeze off tools, caps, plugs, and related equipment and supplies to effect emergency repair, shut off, or blockage of gas flow. Meets scheduling and attendance requirements.

Mental: Evaluates project management processes prior to project start in order to coordinate schedules, material needs, needs of various agencies, and testing and system commissioning. Evaluates pressure test charts to determine if the gas line tested meets established standards regarding amount of pressure, length of test period, and variance caused other than by leaks in the line. Identifies causes of variances in gas lines tested. Certifies PE fusers by testing, monitoring, evaluating, and approving those tested. Interprets maps, project plans, and blueprints to determine proper gas materials and installation location. Evaluates electric arc welds, and PE fusion joints in the field to ensure that they meet City and regulatory agency specifications and standards.

Knowledge and Abilities:

Knowledge of:

procedures and standards for installing, maintaining, and repairing natural gas mains and services;
the tools, equipment, materials, and supplies used in installing, maintaining, and repairing natural gas mains and services;
safety equipment and procedures used when working on and around natural gas and other utility lines;
arc welding techniques and procedures approved for gas pipeline connection;

PE fusion techniques and procedures approved for gas pipeline connection;
fundamental engineering principles;
gas pipeline inspection (including pressure testing, purging, and tie-ins) principles, procedures, and standards;
the general layout of the City's natural gas system;
the basic principles of cathodic protection;
DOT regulations concerning gas pipeline safety; and
emergency response procedures and gas leak detection procedures.

Ability to:

conduct gas system purging, pressurization, and activation;
work in stressful situations, such as gas emergencies;
maintain a high volume of work output with minimal supervision;
interact with coworkers, contractors, and the general public to establish and maintain effective working relationships;
coordinate various facets of gas system projects;
prepare and review various gas system procedures for installation and repair; and
evaluate and prepare reports on various types of equipment used for gas system installation/repair.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

Revised 6/18

LW/aa/co

CS4401.DOCX

EEO-Tech

JOB FCTN-TEC

INCREMENTS 53-200

PAY GRADE: 50

IND-7502

SWORN-No